

In the Claims

Claim 1 (Currently amended): A method for delivering a polynucleotide encoding a protein to a vertebrate cell, said method comprising introducing into said vertebrate cell a recombinant entomopox virus vector comprising said polynucleotide operably linked with a promoter sequence, wherein said promoter sequence is a heterologous early pox promoter sequence or a non-pox promoter sequence, thereby delivering and expressing said polynucleotide encoding said protein in said vertebrate cell.

Claim 2 (Original): The method according to claim 1, wherein said vertebrate cell is a mammalian cell.

Claim 3 (Original): The method according to claim 2, wherein said mammalian cell is a human cell.

Claim 4 (Currently amended): The method according to claim 1, wherein said vector further comprises inverted terminal repeat sequences flanking said polynucleotide encoding said protein.

Claim 5 (Original): The method according to claim 4, wherein said inverted terminal repeat sequences are derived from adeno-associated virus.

Claim 6 (Cancelled)

Claim 7 (Original): The method according to claim 6, wherein said promoter sequence is selected from the group consisting of a CMV promoter sequence and herpes TK promoter sequence.

Claim 8 (Original): The method according to claim 1, wherein said protein encoded by said polynucleotide is selected from the group consisting of interleukins, cytokines, growth factors, interferons, enzymes, and structural proteins.

Claim 9 (Original): The method according to claim 1, wherein said vector is introduced into said vertebrate cell by infection in a viral particle.

Claim 10 (Original): The method according to claim 1, wherein said vector is introduced into said vertebrate cell by means selected from the group consisting of transfection, transduction, and injection.

Claim 11 (Original): The method according to claim 1, wherein said vector is introduced into said vertebrate cell *in vivo*.

Claim 12 (Original): The method according to claim 1, wherein said polynucleotide encoding said protein is greater than about 10 kb in size.

Claim 13 (Original): The method according to claim 1, wherein said polynucleotide also encodes a selectable marker protein.

Claim 14 (Currently amended): A An isolated vertebrate cell comprising a recombinant entomopox virus vector comprising a polynucleotide encoding a protein operably linked with a heterologous promoter sequence, wherein said heterologous promoter sequence is a heterologous early pox promoter sequence or a non-pox promoter sequence, wherein said non-poxvirus promoter sequence is activated by the cellular RNA polymerase of said vertebrate cell.

Claim 15 (Currently amended): The vertebrate cell according to claim 14, wherein said cell expresses said protein encoded by said polynucleotide to produce said protein.

Claim 16 (Currently amended): A An isolated human cell comprising a recombinant entomopox virus vector comprising a polynucleotide encoding a protein operably linked with a heterologous early pox promoter sequence or a non-poxvirus promoter sequence, wherein said non-poxvirus promoter sequence is activated by the cellular RNA polymerase of said human cell.

Claim 17 (New): The human cell of claim 16, wherein said cell expresses said polynucleotide to produce said protein.

Claim 18 (New): A method for delivering a polynucleotide encoding a protein to a vertebrate cell, said method comprising introducing into said vertebrate cell, locally, *in vivo* a recombinant entomopox virus vector comprising said polynucleotide operably linked with a promoter sequence, wherein said promoter sequence is a heterologous early pox promoter sequence or a non-pox promoter sequence, thereby delivering and expressing said polynucleotide encoding said protein in said vertebrate cell.